or receiving Office use only International Application No. REQUEST International Filing Date The undersigned requests that the present international application be processed Name of receiving Office and "PCT International Application" according to the Patent Cooperation Treaty. Applicant's or agent's file reference (if desired) (12 characters maximum) PCB/P89103PWO TITLE OF INVENTION Box No. I DNA POLYMERASES This person is also inventor. APPLICANT Box No. II Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) Telephone No. Facsimile No. THE UNIVERSITY OF NEWCASTLE **6 KENSINGTON TERRACE** Teleprinter No. JESMOND . NEWCASTLE UPON TYNE, NE1 7RU Applicant's registration No. with the Office State (that is, country) of residence: State (that is, country) of nationality: UNITED KINGDOM UNITED KINGDOM the United States of America only the States indicated in the Supplemental Box all designated States all designated States except the United States of America This person is applicant for the purposes of: FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Box No. III Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is: applicant only BERNARD CONNOLLY applicant and inventor School of Cell and Molecular Biosciences inventor only (If this check-box is marked, do not fill in below.) University of Newcastle Applicant's registration No. with the Office Newcastle upon Tyne NE2 4HH State (that is, country) of residence: State (that is, country) of nationality: UNITED KINGDOM UNITED KINGDOM the States indicated in the Supplemental Box the United States of America only all designated States except the United States of America all designated States This person is applicant for the purposes of: Further applicants and/or (further) inventors are indicated on a continuation sheet. AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE common The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: agent X representative · Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) Telephone No. 0113 389 5600 Facsimile No. DR P. C. BANFORD 0113 389 5601 MARKS & CLERK Teleprinter No. 43 PARK PLACE LEEDS, LS1 2RY Agent's registration No. with the Office UNITED KINGDOM Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

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Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER)	
If none of the following sub-boxes is used, this sheet should not be included in the rec	quest.
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) MARK FOGG Structural Biology Lab, Department of Chemistry University of York York	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
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Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) LAWRENCE PEARL Centre for Structural Biology Institute of Cancer Research Chester Beatty Laboratories 237 Fulham Road, London, SW3 6JB	applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality: UNITED KINGDOM State (that is, country) UNITED KINGDOM	GDOM
This person is applicant for the purposes of: all designated States except the United States of America	the United States of America only the Supplemental Box
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Further applicants and/or (further) inventors are indicated on another continuat	ion sheet.

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The following designations are hereby inside under Rule 4.9(a): Regional Patent ARIPO Patent: OH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudán, SM Sistera Leona, SZ Swaziland, TZ United Republic of Tenzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and my other SL Sistera Leona, SZ Swaziland, TZ United Republic of Tenzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and my other State which is a Contracting State of the Herare Frotocal and of the PCT (fother kind of protection or reasonate desired, State value) in a Contracting State of the Herare Fatentian, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Federation. TJ Tajickitan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Region of the PCT. Patent Convention and of the PCT. Patent Convention and of the PCT. Fatent Convention and of the PCT. Fatent Convention and Other State which is a Contracting Spain, IF Inlands, FF France, GB United Kingdom, GR Greece Republic, DE Germany LD Lovembourg, MC Monaco, NL Netherlands, FT Portugal, SE Swedex, SI Stovania, SK Stovania IF Inland, TJ Inay Chang and State of Contracting State of the European Patent Convention and of the PCT TR Turkey, and not protection for State which is a contracting State of the European Patent Convention and of the PCT TR Turkey, and may other State which is a member State of OAFi and a Contracting State of the PCT Group and any other State which is a member State of OAFi and a Contracting State of the PCT Group and any other State which is a member State of OAFi and a Contracting State of the PCT (fother in Track) and the PCT Group, and any other State which is a member State of OAFi and a Contracting State of the PCT (fother in Track) and the PCT Group and American Group and Am	Box No.	V DESIGNATION OF STATES	Mark the applicable check-boxes below; at least one must be marked.
Regional Patent AP ARIDO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, LS Sierra Leone, SZ Sweziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, WZ Mimbowe, and my other Site which is a Contracting State of the Harare Protocol and of the PCT (for other kind of protection or neumann decived, specify on dorled line) EA Eurasian Faderation, LT apikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian RU Russian Federation, LT apikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian RU Russian Federation, LT apikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Russian Federation, LT apikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Russian Republic, DE Germany, DK Demonson, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovenia IE Irisand, TT Italy, LU namehourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovenia IE Irisand, TT Italy, LU namehourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovenia IE Irisand, TT Italy, LU namehourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovenia, GW Gunter-Risson, MC Musli, MR Mauritain, NR Niegre, SN Senegal GA Gabon, GN Guntes, GW Gunter-Risson, GW Gun			der Rule 4.9(a):
ARIPO Patent: GH Ghens, GM Gambis, KE Kenye, LS Lesotho, Mw Galkwi, M.J. Weisher, W.J. Weisher, M.J. Weisher, M.J. Weisher, W.J. Weisher, W.J.	· L		
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Box No. VI PRIORITY	CLAIM	· · · · · · · · · · · · · · · · · · ·				
The priority of the following	earlier application(s) is hereb					
· Filing date	Number	Where earlier application is:				
of earlier application of earlier application (day/month/year)		national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office		
item (1) 17/04/2002 17th April 2002	0208768.2	UNITED KINGDOM				
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	are indicated in the Supplemental state of the prepare and transmit					
The receiving Office is requested to prepare and translation to the International application is the receiving Office) identified if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as: X all.items item (1) item (2) item (3) item (4) item (5) Other, see Supplemental Box						
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Box No. VIII DECLARA		TITIT (D. C. C.) (T. J. J.	- linchlo	Number of		
The following declaration check-boxes below and indi	s are contained in Boxes Nos cate in the right column the nu	imber of each type of decid	арумилине ration):	declarations		
Box No. VIII (i) Declaration as to the identity of the inventor						
Box No. VIII (ii)	date, to apply for and be		•	:		
Box No. VIII (iii)	Box No. VIII (iii) Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application:					
Box No. VIII (iv) Declaration of inventorship (only for the purposes of the designation of the United States of America):						
Box No. VIII (v)	Declaration as to non-pre	ejudicial disclosures or exc	ceptions to lack of novel	ty :		

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Box No. IX CHECK LIST; LANGUAGE OF FILING					
This international application contains: (a) in paper form, the following number of	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items			
sheets: request (including 1. 🛣 fee calculation sheet					
declaration sheets) : 5	2. original separate power of attorney	:			
description (excluding	3. original general power of attorney	:			
sequence listings and/or tables related thereto) : 25	4. copy of general power of attorney; reference number, if any:	. :			
claims 4		:			
abstract : 1	 5. statement explaining lack of signature 6. priority document(s) identified in Box No. VI as 	ļ			
drawings : 7	item(s):	. :			
Sub-total number of sheets: 42 sequence listings	7. ☐ translation of international application into (language):	. :			
tables related thereto (for both, actual number of	8. separate indications concerning deposited microorganism or other biological material	:			
sheets if filed in paper form, whether or not also filed in	9. Sequence listings in computer readable form (indicate type and number of carriers)				
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(b) only in computer readable form (Section 801(a)(i))	purposes of international search under Rule 13ter (iii) together with relevant statement as to the identity of the con-	; ov or			
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(c) also in computer readable form (Section 801(a)(ii))	10. tables in computer readable form related to sequence listings (indicate type and number of carriers)				
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(ii) tables related thereto	application) (ii) (only where check-box (b)(ii) or (c)(ii) is marked in left column for	1)			
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sequence listings:	(iii) together with relevant statement as to the identity of the concopies with the tables mentioned in left column	py or :			
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(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)	11 Omer (spectyy).				
Figure of the drawings which should accompany the abstract:	Language of filing of the international application:				
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Next to each signature, indicate the name of the person signature. DR P. G. BANFORD	Next to each signature, indicate the name of the person signing and the capacity in which the person signs (ty such capacity is not obvious) on reduing the requesty.				
	For receiving Office use only	rawings:			
Date of actual receipt of the purported international application:		received:			
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:					
4. Date of timely receipt of the required corrections under PCT Article 11(2):					
5. International Searching Authority (if two or more are competent): ISA / 6. Transmittal of search copy delayed until search fee is paid					
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2.	Patent application or patent number(s) (see notes (c) & (d))	0208768.2
3.	Full name of the or of each applicant or	THE UNIVERSITY OF NEWCASTLE
	proprietor (if known)	
4.	What do you want a copy of? (See note (f))	AN APPLICATION AS FILED
<u> </u>		
5.	How many copies do you need?	1
		CERTIFICATION AND CEAL.
6.	State the type of certificate you want (see note (g)) and if it is needed to support	CERTIFIED WITH SIGNATURE AND SEAL: COPY FOR USE IN CONNECTION WITH A PCT APPLICATION.
	applications made outside the United Kingdom, list the countries concerned (see notes (j) & (k))	FCI AFFLICATION.
	(1000 110000 ()) 00 (19)	
7.	Name, address and postcode of the or of each	MARKS & CLERK, 43 PARK PLACE,
٠	person making this request (see note (b))	LEEDS, LS1 2RY, UNITED KINGDOM
•		
8.	Name, address and postcode of the or of each person certificates or copies should be sent to	SEND TO THE INTERNATIONAL UNIT AS PRIORITY DOCUMENTS FOR PCT PATENT
	(if different from that given in part 6 above) (see note (i))	APPLICATION NO.
9.	Si	gnature
		MARKS & CLERK 14/04/03
10.	Name and daytime telephone number of person to contact in the United Kingdom D	R P. C. BANFORD – 0113 3895606

From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence).

To:

BANFORD, P., C. Marks & Clerk

43 Park Place

Leeds LS1 2RY ROYAUME-UNI

Date of mailing (day/month/year)
23 October 2003 (23.10.03)

Applicant's or agent's file reference PCB/P89103PWO ✓

IMPORTANT NOTICE

International application No. PCT/GB03/01623

International filing date (day/month/year) 15 April 2003 (15.04.03)

Priority date (day/month/year)
17 April 2002 (17.04.02)

Applicant

THE UNIVERSITY OF NEWCASTLE et al

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, AZ, BY, CH, CN, CO, DE, DZ, HU, JP, KG, KP, KR, MD, MK, MZ, RU, TM, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, BA, BB, BG, BR, BZ, CA, CR, CU, CZ, DK, DM, EA, EC, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, TJ, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

- Enclosed with this notice is a copy of the international application as published by the International Bureau on 30 October 2003 (30.10.03) under No. 03/089637
- 4. TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette, the PCT Newsletter and the PCT Applicant's Guide, Volume II, National Chapters, all available from WIPO's Internet site, at http://www.wipo.int/pct/en/index.html.

For filing a demand for international preliminary examination, see the PCT Applicant's Guide, Volume VA, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Judith Zahra

Facsimile No.(41-22) 740.14.35

Telephone No.(41-22) 338.91.11

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